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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,647

07/19/2007

Hamid Falaki

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12/16/2009

WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C.

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EXAMINER

SAMS, MATTHEW C

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,647	<b>Applicant(s)</b> FALAKI ET AL.	
	<b>Examiner</b> MATTHEW SAMS	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statements filed on 2/20/2007 and 8/4/2009 have been considered.

### ***Drawings***

3. The drawings filed on 3/7/2008 are accepted.

### ***Oath/Declaration***

4. The Petition to continue prosecution without the signature of Veluppillai Manimohan has been approved by OIPE on 8/15/2008.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. Further, incorporation by reference to a specific

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figure or table “is permitted only in exceptional circumstances where there is no practical way to define the invention in words and where it is more concise to incorporate by reference than duplicating a drawing or table into the claim. Incorporation by reference is a necessity doctrine, not for applicant’s convenience.” Ex parte Fressola, 27 USPQ2d 1608, 1609 (Bd. Pat. App. & Inter. 1993) (citations omitted). Reference characters corresponding to elements recited in the detailed description and the drawings may be used in conjunction with the recitation of the same element or group of elements in the claims.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vialen et al. (US-2002/0066011 hereinafter, Vialen) in view of Edge (US-7,155,244).

Regarding claim 1, Vialen teaches a method of handover (Page 2 [0015] “When an inter-system handover from UMTS to GSM is triggered”) from a first radio access technology (Page 2 [0015] “UMTS”) to a second radio access technology (Page 2 [0015] “GSM”) for a mobile radio communications device (Fig. 1 [UE1 & UE2]) within a mobile radio communications network (Fig. 1) and including determining a timing

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advance value associated with the second radio access technology. (Page 2 [0015] “GSM Timing Advance Information”)

Vialen differs from the claimed invention by not explicitly reciting employing positional data of the device within the network for determining the said timing advance value.

In analogous art, Edge teaches a method for precise timing within wireless communication networks (Abstract) that includes UMTS (Col. 8 lines 29-37) and GSM (Col. 8 lines 19-29) system with the ability to employ positional data of the device within the network for determining a timing advance value. (Col. 10 lines 59-67 and Col. 6 line 59 through Col. 7 line 10) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to implement the method of handover of Vialen after modifying it to incorporate the ability to use positional data to determine a timing advance value of Edge since absolute timing differences are critical for correctly recognizing at the mobile device, the delays in receiving signals from neighboring base stations caused by the propagation delay, thereby synchronizing with the base station. (Edge Col. 3 line 66 through Col. 4 line 7) Further, utilizing position data for deriving the absolute timing difference provides a more accurate value than can otherwise be obtained, thereby reducing errors. (Edge Col. 11 lines 1-53)

Regarding claim 2, Vialen in view of Edge teaches wherein the timing advance value is also determined on the basis of the location of the base station system associated with the second radio access technology. (Edge Col. 10 lines 59-67)

Regarding claim 3, Vialen in view of Edge teaches providing the device with the timing advance value prior to handoff (Vialen Pages 2-3 [0015] “The terminal may

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receive a Physical Information 408 message as a response to the Handover Access messages. The Physical Information message contains only the GSM Timing Advance information.”), which is determined as a result the positional data of the device. (Edge Col. 10 lines 59-67)

Regarding claim 4, Vialen in view of Edge teaches wherein the timing advance value is determined within the network. (Vialen Pages 2-3 [0015] and Edge Col. 10 lines 59-67)

Regarding claim 5, Vialen in view of Edge teaches wherein the positional data is provided within a service radio network controller of the network. (Edge Col. 10 lines 55-59)

Regarding claim 6, Vialen in view of Edge teaches wherein the positional data is delivered by way of a core network arrangement to the base station system. (Vialen Fig. 4 [404-406] and Pages 2-3 [0015] “Intersystem Handover Command” can include the required Timing Advance information, received from the MSC)

Regarding claim 7, Vialen in view of Edge teaches wherein the timing advance value is signaled to the device from the base station system. (Vialen Pages 2-3 [0015] “The Physical Information message contains only the GSM Timing Advance information.” and Fig. 4)

Regarding claim 8, Vialen in view of Edge teaches wherein the timing advance value is included within the handover command as received by the device. (Vialen Pages 2-3 [0015] and Fig. 4)

Regarding claim 9, Vialen in view of Edge teaches wherein the timing advance value is determined within the device. (Edge Col. 8 lines 54-59)

Regarding claim 10, Vialen teaches a mobile communications system (Fig. 1) arranged for operation with a first radio access technology (Page 2 [0015] "UMTS") and a second radio access technology (Page 2 [0015] "GSM") and including means for initiating the handover of a mobile radio communications device (Fig. 1 [UE1 & UE2]) from the first radio access technology to the second radio access technology (Page 2 [0015] "When an inter-system handover from UMTS to GSM is triggered"), and including determining a timing advance value associated with the second radio access technology. (Page 2 [0015] "GSM Timing Advance Information")

Vialen differs from the claimed invention by not explicitly reciting employing positional data of the device within the network for determining the said timing advance value.

In analogous art, Edge teaches a method for precise timing within wireless communication networks (Abstract) that includes UMTS (Col. 8 lines 29-37) and GSM (Col. 8 lines 19-29) system with the ability to employ positional data of the device within the network for determining a timing advance value. (Col. 10 lines 59-67 and Col. 6 line 59 through Col. 7 line 10) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to implement the method of handover of Vialen after modifying it to incorporate the ability to use positional data to determine a timing advance value of Edge since absolute timing differences are critical for correctly recognizing at the mobile device, the delays in receiving signals from neighboring base stations caused by the propagation delay, thereby synchronizing with the base station. (Edge Col. 3 line 66 through Col. 4 line 7) Further, utilizing position

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data for deriving the absolute timing difference provides a more accurate value than can otherwise be obtained, thereby reducing errors. (Edge Col. 11 lines 1-53)

Regarding claim 11, the limitations of claim 11 are rejected as being the same reasons set forth above in claim 2.

Regarding claim 12, the limitations of claim 12 are rejected as being the same reasons set forth above in claim 3.

Regarding claim 13, the limitations of claim 13 are rejected as being the same reasons set forth above in claim 4.

Regarding claim 14, the limitations of claim 14 are rejected as being the same reasons set forth above in claim 5.

Regarding claim 15, the limitations of claim 15 are rejected as being the same reasons set forth above in claim 6.

Regarding claim 16, the limitations of claim 16 are rejected as being the same reasons set forth above in claim 7.

Regarding claim 17, the limitations of claim 17 are rejected as being the same reasons set forth above in claim 8.

Regarding claim 18, the limitations of claim 18 are rejected as being the same reasons set forth above in claim 9.

Regarding claim 19, the limitations of claim 19 are rejected as being the same reasons set forth above in claim 1.

Regarding claim 20, the limitations of claim 20 are rejected as being the same reasons set forth above in claim 10.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW SAMS whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MATTHEW SAMS/  
Examiner, Art Unit 2617